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(71) Applicant (for all designated States except US): **TI-BOTEC PHARMACEUTICALS Ltd.** [—/IE]; Little Island, Co Cork (IE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **QUAEDFLIEG, Peter, Jan, Leonard, Mario** [NL/NL]; Brahmstraat 13, NL-5583 ZG Waalre (NL). **KESTELEYN, Bart, Rudolf, Romanie** [BE/BE]; Weidelandstraat 18, B-9290 Berlare (BE). **VIJN, Robert, Jan** [NL/NL]; Leeuwerikstraat 48, NL-5922 VM Venlo (NL). **LIEBREGTS, Constantinus, Simon, Maria** [NL/NL]; Holterbergweide 14, NL-5709 MP Helmond (NL). **KOOISTRA, Jacob, Hermanus, Matheus, Hero** [NL/NL]; Parkweg 16, NL-9751 CS Haren (NL). **LOMMEN, Franciscus, Alphons, Marie** [NL/NL]; van Bronckhorststraat 78, NL-5961 SM Horst (NL).

(74) Agent: **DAELEMANS, Frank**; Tibotec-Virco Comm. VA, Generaal De Wittelaan L 11B 3, B-2800 Mechelen (BE).

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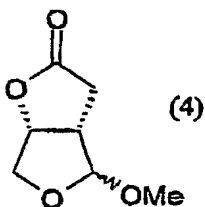
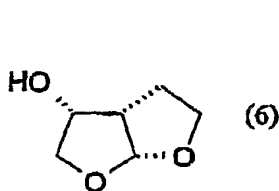
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
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(54) Title: METHODS FOR THE PREPARATION OF (3R,3aS,6aR) HEXAHYDRO-FURO[2,3-b]FURAN-3-OL



(57) Abstract: The present invention relates to methods for the preparation of diastereomerically pure (3R,3aS,6aR) hexahydro-furo[2,3-b]furan-3-ol (6) as well as a novel intermediate, (3aR,4S,6aS) 4-methoxy-tetrahydro-furo[3,4-b]furan-2-one (4) for use in said methods. More in particular the invention relates to a stereoselective method for the preparation of diastereomerically pure (3R,3aS,6aR) hexahydro-furo[2,3-b]furan-3-ol, as well as methods for the crystallization of (3aR,4S,6aS) 4-methoxy-tetrahydro-furo[3,4-b]furan-2-one and for the epimerization of (3aR,4R,6aS) 4-methoxy-tetrahydro-furo[3,4-b]furan-2-one to (3aR,4S,6aS) 4-methoxy-tetrahydro-furo[3,4-b]furan-2-one.